

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. In the specification

The specification is amended, as shown in the foregoing AMENDMENT TO THE SPECIFICATION, to correct minor informalities to comply with U.S. practices and amended to remove specific reference to the claims. No new matter is added, as the changes simply correct minor informalities.

Entry of the AMENDMENT TO THE SPECIFICATION is respectfully requested in the next Office communication.

2. In the claims

As shown in the foregoing LIST OF CURRENT CLAIMS, the claims have been amended to more clearly point out the subject matter for which protection is sought.

A. Claim Election

The applicant hereby elects Group I. Claims 1-22 and 41-43 are directed to the elected species. The applicant hereby reserves all rights to the non-elected subject matter.

This election is made without traverse with regard to the election of Group I as discussed with the Examiner on March 5, 2010 during a telephone conversation in response to the restriction requirement under 35 U.S.C. § 121.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

B. Claim Amendments

Claim 1 is amended to recite that the first feature substance is formed by a luminescent substance emitting in the absorption range of the third feature substance and the third feature substance does not absorb at a certain emission wavelength of the first feature substance; and a fourth feature substance is applied to the value document substrate different from the first, second, and third feature substances, wherein the third feature substance absorbs at least part of the emission radiation at a certain emission wavelength of the fourth feature substance.

It is respectfully submitted that no new matter is added, since support for the amendments may be found, for example, at least in claims 1, 3, 9, and 10 of the pending application and, for example, at least in paragraphs [0033] and [0041] of the accompanying description in the specification as originally filed.

Claims 4 and 6-8 are amended to provide proper dependency from now canceled claim 3 to claim 1.

Claim 5 is amended to provide proper dependency from now canceled claim 3 to claim 1. Additionally, claim 5 is amended to recite the third feature substance absorbs in a spectral range. It is respectfully submitted that no new matter is added, since support for the amendment may be found, for example, at least in claim 5 as originally filed, and, for example, at least in paragraph [0015] of the specification as originally filed.

Claim 11 is amended to recite a luminescent substance. It is respectfully submitted that no new matter is added, since support for the amendment may be found, for example, at least in claim 11 as originally filed.

Claim 22 is amended to a fourth feature substance comprising a print in the form of a printed image. It is respectfully submitted that no new matter is added, since support for this amendment may be found, for example, at least in claim 22 as originally filed, and, for example, at least in paragraph [0062] of the specification.

Claims 3, 9, 10 are canceled without prejudice or disclaimer.

Claims 12-21 and 41-43 are left unchanged.

C. Claim Objections

Reconsideration of this objection is respectfully requested in view of the amendments to claims 1, 11, and 22 on the basis that the claims have been amended to correct the grammatical errors. Accordingly, withdrawal of this objection is respectfully requested.

Entry of the LIST OF CURRENT CLAIMS is respectfully requested in the next Office communication.

3. Rejection of claims 2, 4-6, 13, 20-22 and 41 under 35 U.S.C. § 112, second paragraph

Reconsideration of this rejection is respectfully requested on the basis that one having ordinary skill in the art would know of the meaning of the terms “substantially,” “significantly,” “significant,” “predominant” and “partly” as used in the claims. Additionally, claim 5 has been amended to remove the indefinite term of “significantly.”

Although the Office action, dated June 21, 2010, states on page 6 that the terms are not defined by the claims or the specification does not provide a standard for ascertaining the requisite degree of any of the terms, it is respectfully submitted that the specification provides the general guidelines to ascertain these values.

Specifically, “substantially uniform” is disclosed in the specification in paragraph [0012] as being “so that sufficiently large volume elements of equal size each contain a substantially equal quantity of the first feature substance.” Furthermore, the specification discloses in paragraph [0014] that “substantially colorless” means “has only weak inherent color in the visible spectral range.”

Additionally, it is respectfully submitted that the specification discloses in paragraph [0015] that “significant absorption” means “cannot be detected with commercially available silicon-based infrared detectors.”

Still further, it is respectfully submitted that the specification discloses in paragraph [0025] that “predominant” means “over the substantially total surface of the value document.”

Finally, it is respectfully submitted that the specification discloses in paragraph [0034] that “partly or completely covers” means “the printed layer can be opaque in the visible spectral range, and transparent or translucent in the emission range of the second feature substance and/or in the absorption range of the third feature substance.”

It is respectfully submitted that since the specification provides general guidelines with respect to the claims, one having ordinary skill in the art would appreciate this disclosure to distinctly claim the subject matter of these claims. *See* M.P.E.P. § 2173.05(b). Furthermore, claim 5 has been amended to more particularly point out the subject matter of the claim.

Accordingly, withdrawal of this rejection is respectfully requested.

4. Rejection of claims 1-22, 41 and 43 under 35 U.S.C. § 103(a) as being unpatentable over U.S. pat. no. 6,530,527 (*Ahlers et al.*) in view of U.S. pat. no. 6,155,605 (*Bratchley et al.*)

Reconsideration of this rejection is respectfully requested, in view of the amendments to claim 1, on the basis that the *Ahlers* patent in view of the *Bratchley* patent fail to establish a *prima facie* case of obviousness with respect to amended claim 1. The remaining claims depend from claim 1, and are therefore patentable as containing all of the recited elements of claim 1, as well as for their respective recited features.

Claim 1 recites, among other inventive features, a value document comprising a value document substrate and different feature substances. A first feature substance is

incorporated into the volume of the substrate of the value document. A second and third feature substance are provided on the value document substrate in a printing ink, wherein the second feature substance comprises a luminescent substance, and the third feature substance comprises a material absorbent in an infrared spectral range. And a fourth feature substance is applied to the value document substrate different from the first, second and third feature substances, wherein the third feature substance absorbs at least part of the emission radiation at a certain emission wavelength of the fourth feature substance. It is respectfully submitted that these features allow certain absorbers to be easily detected to protect against forgeries (paragraph [0041]).

It is respectfully submitted, that the *Ahlers* in view of the *Bratchley* patent does not teach or disclose that the third feature substance does not absorb at a certain emission wavelength of the first feature substance or absorbs at least part of the emission radiation at a certain emission wavelength of the fourth feature substance, as required by amended claim 1.

The *Ahlers* patent discloses electroluminescent substances that are excited on alternating electromagnetic fields (column 3, lines 13-14). By building the electric field laterally or within the surface itself, a multi-layered arrangement of surface electroluminescent systems can be eliminated (column 2, lines 19-39). This is accomplished by pressing the electroluminescent system paste on the surface of the security document (column 3, lines 44-49). Then these different electroluminescent layers are excited using alternating electromagnetic fields (column 3, lines 11-13).

Meanwhile, the *Bratchley* patent discloses detecting one or more properties of the different luminescent materials (column 6, lines 16-38). The *Bratchley* patent discloses having at least three different detectable characteristics incorporated on the document substrate (column 4, lines 13-46). In some cases, the entities can be sandwiched between one or more layers or incorporated into the substrate itself (column 4, lines 53-58).

Additionally, the *Bratchley* patent discloses incorporating bar codes in the low security or high security elements (column 5, lines 28-34).

In other words, both the *Ahlers* and the *Bratchley* patents only disclose the structure of the substrate or detecting the excited light, respectively, rather than any functional limitation of the materials. At most, one having ordinary skill in the art, when combining the *Ahlers* and *Bratchley* patents, would only have been led to a substance having four feature substances, of which two feature substances can be coding. It is respectfully submitted that it is not within the knowledge of one having ordinary skill in the art to ascertain, in view of the cited reference disclosures, the features of amended claim 1 which recites that the third feature substance does not absorb at a certain emission wavelength of the first feature but does absorb at least part of the emission radiation of the fourth feature substance.

Since the M.P.E.P § 2173.05(g) states “functional limitations must be evaluated and considered, just like any other limitation of the claim,” it is respectfully submitted that the *Ahlers* in view of the *Bratchley* patent does not disclose this feature of amended claim 1. Since the *Ahlers* patent in view of the *Bratchley* patent fails to establish a *prima facie* case of obviousness, claim 1 is patentable over the cited prior art.

As mentioned above, applicants submit that independent claim 1 is patentable and therefore, claims 2-22, 41, and 43 which depend from claim 1, are also considered to be patentable as containing all of the elements of claim 1, as well as for their respective recited features.

Accordingly, withdrawal of this rejection is respectfully requested.

5. Rejection of claim 42 under 35 U.S.C. § 103(a) as being unpatentable over U.S. pat. no. 6,530,527 (*Ahlers et al.*) in view of U.S. pat. no. 6,155,605 (*Bratchley et al.*) and further in view of U.S. pub. no. 2002/0188845 (*Henderson et al.*)

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claim 42, on

the basis that the *Ahlers* and *Bratchley* patents fail to establish a *prima facie* case of obviousness with respect to claim 1 as discussed above in detail, from which claim 42 depends. Furthermore, the *Henderson* patent fails to cure the deficiencies of the cited prior art.

Accordingly, withdrawal of this rejection is respectfully requested.

6. Rejection of claims 1-23, 27-29, 31-40, 42, 43, and 45 on the ground of nonstatutory obviousness-type double patenting over claims 1-10, 12-29 and 31-43 of copending U.S. App. No. 10/574,838

Withdrawal of this rejection is respectfully requested on the basis that the pending claims are not obvious over the claims of copending U.S. App. No. 10/574,838.

Amended claim 1 recites, among other inventive features, a value document comprising a value document substrate and different feature substances. A first feature substance is incorporated into the volume of the substrate of the value document. A second and third feature substance are provided on the value document substrate in a printing ink, wherein the second feature substance comprises a luminescent substance, and the third feature substance comprises a material absorbent in an infrared spectral range. And a fourth feature substance is applied to the value document substrate different from the first, second and third feature substances, wherein the third feature substance absorbs at least part of the emission radiation at a certain emission wavelength of the fourth feature substance.

It is respectfully submitted that the pending claims are distinct over the claims of copending U.S. App. No. 10/574,838 ('838 *Application*) since the claims of the '838 *Application* do not recite the first feature substance formed by a luminescent substance emitting in the absorption range of the third feature substance. Furthermore, the third features substance does not absorb at a certain emission wavelength of the first feature substance or the fourth feature substance which is different from the first to third feature

substances, where the third feature substance absorbs at least part of the emission radiation at a certain emission wavelength of the fourth features substance.

It is submitted that at least these features of the pending claims are non-obvious improvement over the claims of the '838 *Application*. These features create a complex feature system that is very difficult to imitate for a forger since users from different user groups can carry out both an authenticity check and value recognition on the document which are completely separate from each other (paragraph [0073]).

It is submitted that independent claim 1 is patentable and therefore, claims 2-23, 27-29, 31-40, 42, 43, and 45 which incorporate or depend on claim 1, are also considered to be patentable as containing all of the elements of claim 1, as well as for their respective recited features.

Accordingly, withdrawal of this rejection is respectfully requested.

7. Status of Co-Pending Applications

As the examiner is aware, this application is a co-pending application along with U.S. App. No. 10/574,838, which has been allowed; U.S. App. No. 10/575,078, which has been allowed; U.S. App. No. 10/575,074, which is currently pending; U.S. App. No. 10/575,080, which is currently pending; U.S. App. No. 10/575,079, which is currently pending; and U.S. App. No. 11/632,422, which has been issued.

8. Conclusion

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

Please charge any additional fees required or credit any overpayments in connection with this paper to Deposit Account No. 02-0200.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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